



PROGRESS REPORT NO. 101

TO: Dr. Laura Buelow – U.S. Environmental Protection Agency (EPA) - via Email
Matt Wilkening – U.S. Environmental Protection Agency (EPA) - via Email

FROM: Kris McCaig – Teck American Incorporated (TAI)

DATE: December 11, 2014

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 101 Month Ending November 2014

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Phase 2 Sediment Study - Field sampling activities were completed on October 24, 2013. Field sediment and porewater chemistry validated data were submitted to EPA for quality assurance review; EPA provided review comments to TAI on February 26, 2014 and TAI responded with a memo addressing EPA's comments on March 3, 2014.

Short-term bioassay tests (i.e., 10-day *Chironomus dilutes* and 28-day *Hyalella azteca*) were completed for all batches on April 24, 2014. Bioassay test data and analytical chemistry data for porewater and sediment samples collected during the short term bioassay tests have been loaded into the project database; chemistry data is awaiting EPA quality assurance review.

As required by the quality assurance project plan (QAPP), TAI submitted a technical memorandum, using preliminary biology and chemistry data from short term bioassay tests to propose 18 sediment samples for long term bioassay testing, to EPA on June 30, 2014. Following email correspondence and telephone discussions between TAI and EPA through the months of July through September, EPA provided (in an electronic mail message dated October 8, 2014) response to TAI's above referenced technical memorandum. At the time of writing, TAI provided response to EPA's suggested changes to the samples selected for testing, in a memo dated December 2, 2014 (submitted via email).

TAI submitted a proposal to conduct backscatter electron microscopy (BSEM) on archived sediments on February 25, 2014 and followed up in March with supporting

information requested by EPA. EPA provided a memorandum to TAI on June 4, 2014 requesting that 4 new samples be included in addition to those proposed by TAI; TAI submitted a technical memorandum describing how the BSEM will be performed on August 15, 2014. EPA gave approval (via email to TAI on November 6, 2014) for use of the proposed contract laboratory (RJ Lee Group) for BSEM analysis. TAI began working with laboratories to plan for sample shipment from ALS to RJ Lee Group in December 2014.

Bossburg Flat Beach Refined Sediment and Soil Study - TAI is in receipt of EPA's November 13, 2014 letter with comments and conditional approval of the September 2014 Draft Final Version 2 of the QAPP. At the time of writing TAI submitted response to comments and a revised document for final approval by EPA (via email on December 5, 2014).

Soil Study – Field sampling activities commenced on September 8, 2014 and were completed on October 23, 2014. Chemistry analysis of the incremental composite soil samples is underway and validated data will be submitted to EPA by January 26, 2014.

Benthic Macroinvertebrate Tissue Study – TAI is in receipt of EPA's August 19, 2013 Expected Level of Effort For Sampling Benthic Macroinvertebrate Tissue, Upper Columbia River paper and the TAI technical team has been reviewing and evaluating in coordination with EPA and the National Park Service. TAI submitted the Draft Quality Assurance Project Plan for the Macroinvertebrate Tissue Study to EPA on November 18, 2014 for review and comment.

Beach Sediment Study Field Sampling and Data Summary Report (DSR) – TAI is in receipt of EPA's October 31, 2014 letter with comments and conditional approval of the March 2014 Draft Final Beach Sediment Study DSR. At the time of writing TAI submitted to EPA (via email on December 5, 2014) a revised document for final approval and EPA approved the document as final via email on that same day.

Human Health - TAI received from EPA, the draft data analysis report (DAR) for the Recreational Use Survey on January 17, 2014 and submitted comments to EPA on June 11, 2014.

TAI provided comments on the June 20, 2014 draft final Tribal Survey DAR in a letter to EPA dated July 17, 2014; EPA responded via email on November 21, 2014 with response to items 1 and 2 of TAI's comments and indicated "Regarding items 3 through 6 in your letter, EPA will make changes to the report, as appropriate."

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.